

[Claim 5] An optical recording material according to any one of claims 1 to 4, wherein said chalcogenide glass contains Ge and S.

5 [Claim 6] An optical recording medium comprising at least a substrate material, and a recording layer comprising an optical recording material according to any one of claims 1 to 5 formed on said substrate material.

10 [Claim 7] A method for manufacturing an optical recording medium which allows recording of information by irradiation of light comprising a step of simultaneously or alternately forming, on a substrate material, films of chalcogenide glass and of a metal which is diffusible in said chalcogenide glass by irradiation of said light, to form on said substrate material a recording layer having metal particles made of said metal dispersed in said chalcogenide glass.

15 [Claim 8] An optical recording medium fabricated by a method for manufacturing according to claim 7.

20 [Claim 9] An optical recording method comprising a recording step wherein said metal is diffused in said chalcogenide glass by irradiating light on the recording layer of an optical recording

medium according to claim 6 or 8.

[Claim 10] An optical recording method according to claim 9,

5 wherein said light is light with a wavelength of at least $0.7X$ and less than $1.0X$, where X is the wavelength of the short wavelength end of the transmitting region of said chalcogenide glass.

[Claim 11] An optical recording method comprising a hologram recording step wherein said metal
10 is diffused in said chalcogenide glass by irradiating recording light composed of a signal beam and a reference beam on the recording layer of an optical recording medium according to claim 6 or 8.

[Claim 12] An optical recording method
15 according to claim 11,

wherein said signal beam and reference beam are both light with a wavelength of at least $0.7X$ and less than $1.0X$, where X is the wavelength of the short wavelength end of the transmitting region of said
20 chalcogenide glass.

[Claim 13] A reproduction method comprising a step of irradiating reproduction light with a wavelength above the short wavelength end of the transmitting region of said chalcogenide glass onto
25 the recording layer of an optical recording medium which is obtainable by an optical recording method